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ATTORNEY DOCKET NO. 99604845

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:
WILLIAM DANIEL TOOHEY

Serial No. 09/239,671

Filing Date: January 29, 1999

For: DIGITAL VIDEO AUDIT SYSTEM

Group Art Unit: 2876

Examiner: Daniel St. Cyr

Commissioner of Patents
Washington, D.C. 20231

APPEAL BRIEF UNDER 37 CFR 1.192(a) and 37 CFR 1.136(a)

I. Real Party in Interest

The real party interest in this appeal is TransCore, Inc., a corporation ("Appellant"), and owner of United States patent application number 09/239,671, entitled "Digital Video Audit System" (the "Application").

II. Related Appeals and Interferences

There are no other appeals or interferences known to Appellant or to Appellant's legal representative which will directly affect or be directly affected by or have a bearing on the Board of Patent Appeals and Interferences' ("the Board") decision in this appeal.

III. Status of Claims

The pending claims at issue are set forth in Exh. 1. The current status of each claim in the case, including whether such claim is canceled, allowed, or rejected, and whether such claim is on appeal is set forth below:

CLAIM NO.	STATUS	ON APPEAL
1	Rejected	Yes
2	Rejected	Yes
3	Rejected	Yes
4	Rejected	Yes
5	Rejected	Yes
6	Rejected	Yes
7	Rejected	Yes
8	Rejected	Yes
9	Rejected	Yes
10	Rejected	Yes
11	Rejected	Yes
12	Rejected	Yes
13	Rejected	Yes
14	Rejected	Yes
15	Rejected	Yes
16	Rejected	Yes
17	Rejected	Yes
18	Rejected	Yes
19	Rejected	Yes
20	Rejected	Yes
21	Rejected	Yes
22	Rejected	Yes

CLAIM NO.	STATUS	ON APPEAL
23	Rejected	Yes
24	Rejected	Yes
25	Rejected	Yes
26	Rejected	Yes
27	Rejected	Yes

IV. Status of Amendment

The claims are currently as found in the original application, together with the amendment to Claim 12 as presented in the Response to Office Action dated August 23, 2001.

V. Summary of the Invention

The present invention is directed to a system for collecting and organizing video images and data associated with a transaction into a single database. The system includes a database management system for the organizing and data retrieval.

The present invention is used in applications where large amounts of video and non-video data for transactions must be quickly stored for and retrieved. One use of the invention is in connection with the toll plaza data. Toll plazas on highways must store, for each vehicle passing by each toll booth, video data in the form of license plate information, as well as the non-video transactional data such as the time of day, the toll

charged, etc. Such data must be quickly retrievable in connection with the audits performed by governments on the toll booth data.[1]

The key to this system is the use of a database controlled by a database management system to quickly store the video images and transaction data, and to organize that data for fast retrieval. The use of the invention in the toll plaza environment discussed above is shown in Figs. 1 and 2. A video camera 8a or 8b is used to make a video record of each transaction by a vehicle passing through a toll plaza. That video data is transmitted to a computer system 30. The video data enters the computer through a video splitter 32 and is processed by a video digitizer 30b that converts the analog images into digital images.

At the same time, non-video toll collection data is sent to the computer 30 via a port 30a. These data signals represent the collection of money from drivers, the type of vehicle, the time and date of the toll collection, etc. The port and the video digitizer communicate through a bus network 30d to a File Management System 30c. The File Management System receives the digitized video and the toll plaza data, organizes and synchronizes that data, and then forwards it for storage through a network 36 to a centralized database 37. That database 37 stores the various data and also can be coupled to other toll plaza systems for receiving and processing similar data.

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[1] Vehicles are typically charged different rates depending upon their respective sizes. A two axle vehicle is charged less than a three axle vehicle and both are charged less than a four axle vehicle. Toll booth operators must accurately collect the amount of money depending upon the vehicle. If toll booths consistently charge the incorrect amount, the municipality could see a substantial loss over a protracted period of time. Thus, an audit system is needed to check too booth collectors and make sure they are not making consistent mistakes or, worse, taking money from the municipality.

The process of storing transactional toll data and video data is depicted in Fig. 5. In response to a trigger signal activated by the vehicle, the cameras take an image of the lanes and the transaction data is gathered. The File Management System collects all of this data and builds the appropriate application files in step S55 of Fig. 5. The information in the toll plaza data table and in the video image data table are transferred to the centralized database 37 for data archiving purposes. Figs. 4a-c show the organization of the synchronized transactional and video data within the database. The transactional data is stored in a toll plaza data table 45, and the images are stored in an image data table 47.

When data retrieval is desired, the centralized database 37 receives a user request. The server 38 attached to the database 37 organizes the data in a format that the client 39 can display to the user. Fig. 7 shows the data formatting that occurs upon retrieval. As depicted therein, the video image and toll transaction data are merged into a single display for use by a user. As discussed in the specification, data can be displayed in a variety of formats. Specific queries can also be sent to the database in order to allow customized retrieval.

As also discussed in the specification, while a relational database is contemplated, other kinds of database known to one of ordinary skill in the art can also be utilized such as object-oriented databases, distributed databases, and hierarchical databases can be utilized.

VI. Issues On Appeal

The issues that Appellant wishes the Board of Patent Appeals and Interferences to review in this appeal are:

1. Whether Claims 1-10, 21, and 24-26 are properly rejected under 35 U.S.C. § 102(e) as being anticipated by Katz, U. S. Patent No. 5,920,338 (Exh. 2).

2. Whether Claims 11-20, 22-23, and 27 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Katz.

VII. Grouping of Claims

Appellant submits that Claims 1-11 stand or fall as a group, as they relate to a system for collecting and organizing data. Claims 12-20 stand or fall as a group, as they relate to a method of creating a transaction-based database. Claims 21-23 stand or fall as a group, as they relate to a system for collecting transaction data. Claims 24-27 stand or fall as a group, as they define a database system.

VIII. Argument

A. The Final Office Action

The Final Office Action in this case was mailed on November 27, 2001 (Exh. 3). It is from this Final Action that this appeal ensues. As stated therein, the Examiner objected to Claims 1-10, 21, 24-26 under 35 U.S.C. § 102(e) on the basis of Katz, U. S. Patent No. 5,920,338. The Examiner also rejected Claims 11-20, 22-23, and 27 under 35 U.S.C. § 103(a) as unpatentable over Katz.

The prosecution in this case was very abbreviated because of the position taken by the Examiner. The initial Office Action in this case mailed June 21, 2000 (Exh. 4)

made these same rejections. Appellant's Response to that Office Action dated August 23, 2001 (Exh. 5) traversed these rejections and requested reconsideration, amending Claim 12 in the process. The Examiner's response on November 27, 2001 was to simply reassert the same rejections and to make them final.[2]

B. The Rejections Under 35 U.S.C. § 102(e) Are Improper

The sole basis for all of the rejections by the Examiner is U. S. Patent No. 5,920,338 issued to Katz (Exh. 2). The Examiner stated that "Katz discloses an asynchronous video event and transaction data multiplexing technique for [a] surveillance system comprising: a video camera 16 or a plurality of cameras 100, 102, 104 for capturing video images of a transaction; an input device 20 for collecting data associated with the transaction [and] a database management system 14 for organizing the video images and data associated with the transaction" (emphasis added).

The Examiner's analysis is simply incorrect, particularly with regard to the supposed "database management system for organizing the video images and the data associated with the transaction." As a close review of Katz will indicate, the Examiner has misunderstood the fundamental nature of the Katz system. Katz is not directed at all to establishing a single database to record both video images and data associated with a transaction. Instead, and as a review of Fig. 1 of Katz will indicate, the only "database" is the transaction database 14 used to store non-video transaction data. That transaction database is even stored in a different media than the video images

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2 In the November 27, 2001 Office Action, the Examiner stated in the second sentence on page 4 that "the Applicant failed to challenge the rejection [under section

(cont'd)

taken by the camera 16. The video images in Katz are simply recorded on a VCR or similar recording mechanism 22.

Thus, at the outset, there is absolutely no teaching in Katz regarding a common synchronized video/transaction data database. Moreover, there is no teaching of such a database in Katz in the context of a database with a query structure such that a query into the database using a portion of the transaction data acts as a key to retrieving the image correlated to that data. The crucial distinction between Appellant's invention and Katz is that Appellant's invention, as defined in Claim 1, is a system, with a database management component, for collecting and organizing transactional data and video images and data associated with a transaction into a database. Katz's system is not such a system. Likewise, as indicated in Claim 12, Appellant's invention is a method of creating a transaction database comprising the steps of storing an image of a transaction and video data connected to the transaction in a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data. Katz does not disclose this aspect of the invention.

Katz has the same problems as the prior art discussed in the Background of the Invention. That art frequently uses video tape storage of images separate from the storage of the transaction. Indeed, Katz is directed to a surveillance system which asynchronously (i.e., without being phased or in step) records the video signals corresponding to events on one medium (videotape) and transaction data in another

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(... cont'd)
103(a)]." As a review of the August 23, 2001 Office Action will indicate, however, that assertion is simply incorrect.

medium.[3] To achieve playback of this information, the system requires that the transaction data, which is stored separate and apart from the video, be matched with the video being replayed from videotape. As was repeatedly pointed out to the Examiner during prosecution, a thorough review of Katz provides no teaching or suggestion regarding Appellant's storage of both transactional data and video images in a single database as claimed.

In fact, the distinct nature of the present invention and Katz is highlighted by the Examiner's recognition that Katz is an asynchronous relative to the storage of the transactional data in the transaction database and the storage of the video images on the videotape. The asynchronous nature of Katz is what requires the Katz system to generate sequencing signals that are associated with the transaction data and video signals to allow the signals to be brought together at a later time.

By contrast, the present invention is a synchronous system in which the digitized video data and the transactional data are stored in tables on the same storage media such as a disk drive. The present invention combines the data from the digitized video images with clock/calendar data and toll plaza data into the database together as a ongoing and synchronous process such that the data is organized by the File Management System for retrieval as soon as it is stored. Once stored, that synchronized video and transaction data can be quickly retrieved with a database query.

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[3] Katz's system has two separate units to store video images related to a transaction as well as the separate transaction data. As a result of the utilizing of these

(cont'd)

Katz cannot provide the quick retrieval required by the demanding application environment of the present invention. As described, Katz uses separate storage units for video and transactional information, along with requires an entirely separate structure that provides correlation between the two separately stored transaction data and video data. Katz thus requires the searching of two completely different data sources to find related information. Searching a VCR for video information, particularly non-digitized video information, is exceedingly slow. In contrast with Katz, the present invention utilizes a single database for quickly storing and retrieving both video and corresponding data relating to the video information. This is a significant improvement to the system of Katz, particularly since the retrieval is done via a single transactional identifier, rather that the laborious searching of two different data sources in Katz to look for matching data.

In the final Office Action, under the heading "Remarks," the Examiner, stated as follows in response to Appellant's contentions that there was no common video/transaction database within Katz:

> In response to Applicant's general argument that Katz (5,216,502) does not disclose having both transactional data and video data in a database. [sic-,] the Examiner respectfully disagrees. Katz discloses having both transaction data from the lane controller, frames of video, and including additional data to be recorded at the database 50 within the database system 40 (see col. 9, lns. 19-53).

(... cont'd)
two separate and distinct storage media, it is necessary in Katz that each media include data identification signals. See Katz at col. 2, lns. 60-67

From the outset, this is a different Katz patent that formed the basis for the rejections interposed by the Examiner. The '502 Katz patent (Exh. 6) does not disclose a database as item 50. Instead, item 50 in the '502 patent is a video cassette recorder. Item 50 in the '338 patent is a video input. Accordingly, the Examiner's comments on page 3 of the final Office Action are at best puzzling and at worst simply incorrect.

The Examiner went on to state as follows:

> Furthermore, the Applicant claims that a "database management system for organizing the video images and data associated with the transaction into a database." The Applicant **does not** claim in Claims 1 and 12 having **both** transactional data and the video data in the same database. The Applicant's argument is not persuasive.

This statement is equally mystifying. The term "a database" clearly means the same database. Appellant did not state a plurality of databases or different portions of different databases. Appellant clearly stated "a" database. There is no way to read that phrase except that the video and transactional data are combined into the same database. It is respectfully submitted that the Examiner's analysis of the claim is simply wrong.

In summary, by its own disclosure, as well as by the Examiner's own characterization of it as an "asynchronous" system, Katz is not a § 102 reference. In particular, once the Examiner's erroneous determination relative to the database management system is made clear, Katz should be removed completely as a rejection.

Katz does not anticipate any of the groups of claims. The first group of claims, based on independent Claim 1, requires that "database management system for organizing the video images and data associated with the transaction into a database." That element is completely missing from Katz.

The second group of claims, based upon independent Claim 12, requires the "storing the image and the data into a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data." That element is completely missing from Katz.

The third group of claims, based upon independent Claim 21, requires "a computer system for correlating additional data with each image," together with a "storage system for storing the images and the additional data." These elements are absent from Katz due to its asynchronous nature because Katz does simply not correlate (at the time of storage) or store together the images and the data, and instead does no more than place identification signals in each of the two storage media for later correlation.

Relative to the fourth group of claims, based upon Claim 24, Katz does not teach a "storage medium for storing the first and the second image wherein the first and second image are correlated via the identifier." The entire technology of Katz is different. The storage of the transactions and video data into a database for easy retrieval using query instructions so that a particular transaction and its corresponding image are quickly retrieved is completely missing from Katz.

The § 102 rejections should be reversed.

C. The Rejections Under 35 U.S.C. § 103 Are Improper

The Examiner rejected Claims 11-20, 20-23 and 27 as being unpatentable over Katz. The Examiner stated, without citation to any prior art, that whatever was missing from Katz relative to these claims was supplied by the prior art, leading the Examiner to conclude that all aspects of these claims were obvious.

The Examiner's statements regarding Claims 11, 22, 23 and 27 are particularly confusing. The Examiner states that Katz fails to suggest video signals can be captured based upon "a barcode reader reading a bare [sic-bar] code label." Claims 22 and 23 do not deal with barcode readers, as do Claims 11 and 27. As such, the rejection is mystifying. In any event, the fundamental flaw of the Examiner relative to the database issue, when combined with the admission of the Examiner as to the failure of Katz to teach barcodes, only underscores the inappropriateness of Katz as a § 103 reference.

Regarding Claims 12-20, the Examiner again concedes that Katz fails to teach using a portion of the data as a key for retrieving the image correlation data. The Examiner then concludes, again without citation to prior art, that that this part of the invention is old, so as to allow him a reach a conclusion of obviousness for these claims. As discussed above, the concession of the lack of teaching of Katz as to using a key, when combined with the lack of teaching of Katz as to the database, should completely remove Katz as a § 103 reference.

The § 103 rejections should be reversed.

IX. Conclusion

For each and all of the foregoing reasons, Appellant respectfully submits that the § 102 and § 103 rejections should be reversed and pending claims allowed.

Dated: July 23, 2002

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Attorneys for TransCore, Inc.

EXHIBIT 1

EXHIBIT 1

The following claims are involved in this appeal:

CLAIM NO.

1. A system for collecting and organizing data comprising:

a video camera for capturing video images of a transaction;

an input device for collecting data associated with the transaction;

a database management system for organizing the video images and the data associated with the transaction into a database.

2. The system of claim 1 wherein the data associated with the transaction includes time data.

3. The system of claim 1 wherein the data associated with the transaction includes date data.

4. The system of claim 1 wherein the data associated with the transaction includes monetary data.

5. The system of claim 1 wherein the video images are captured based upon a signal that is produced in response to the input device collecting data.

6. The system of claim 1 wherein the images are captured based upon a clock signal.

7. The system of claim 1 further comprising:

a terminal for allowing an operator to input queries into the database and receive the image and the data associated with the transaction in response to the queries.

8. The system of claim 1 wherein the transaction is a toll collection.

9. The system of claim 1 wherein the transaction is a financial transaction.

10. The system of claim 1 wherein the transaction is a retail transaction.

11. The system of claim 10 wherein the video images are captured based upon a bar code reader reading a bar code.

12. A method of creating a transaction based database comprising:

capturing an image of the transaction as the transaction occurs;

collecting data correlating to the transaction;

storing the image and the data into a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data.

13. The method of claim 12 further comprising:

triggering the capturing of the image based on the collecting of data.

14. The method of claim 12 further comprising:

triggering the capturing of the image based on a clock signal.

15. The method of claim 12 further comprising:

retrieving the image and the data from the database in response to the query.

16. The method of claim 15 further comprising:

displaying the image and the data on a monitor for an operator to view.

17. The method of claim 16 wherein the operator makes adjustments to the data stored in the database.

18. The method of claim 15 further comprising:

displaying the next image and associated data on the monitor in response to the operator issuing a request to view the next image.

19. The method of claim 15 further comprising:

displaying the next image and associated data on the monitor in response to the operator issuing a request to view the next transaction in time.

20. The method of claim 15 further comprising;

displaying the next image and associated data on the monitor in response to the operator issuing a request to view the next transaction with a particular value in a particular data field.

21. A system for collecting data about a transaction comprising:

a camera for capturing images of documents related to the transaction;

a trigger system for triggering the camera to capture the images;

a computer system for correlating additional data with each image; and

a storage system for storing the images and the additional data.

22. The system of claim 21 wherein the trigger system is comprised of:

at least one light emitter that emits at least one beam of light;

at least one light detector for detecting the at least one beam of light; and

a pulse generator which outputs a pulse in response to the at least one light detector detecting an object breaking the at least one light beam.

23. The system of claim 22 wherein the object is a financial document.

24. A database system comprising;

a camera for capturing a first and a second image.

a generator for generating an identifier;

a storage medium for storing the first and the second image wherein the first and the second image are correlated via the identifier.

25. The database system of claim 24 further comprising;

an input device for receiving transaction based data related to the first and second image.

26. The database system of claim 25 wherein the input device includes a toll collector.

27 The database system of claim 25 wherein the input device includes a bar code reader.

EXHIBIT 2

US005920338A

United States Patent [19]

Katz

[11] Patent Number: 5,920,338

[45] Date of Patent: *Jul. 6, 1999

[54] ASYNCHRONOUS VIDEO EVENT AND TRANSACTION DATA MULTIPLEXING TECHNIQUE FOR SURVEILLANCE SYSTEMS

[76] Inventor: Barry Katz, 503 Cindy Cir., Penllyn, Pa. 19422

[*] Notice: This patent is subject to a terminal disclaimer.

[21] Appl. No.: 08/964,305

[22] Filed: Nov. 4, 1997

Related U.S. Application Data

[63] Continuation of application No. 08/741,308, Oct. 30, 1996, abandoned, which is a continuation of application No. 08/232,363, Apr. 25, 1994, abandoned.

[51] Int. Cl.[6] H04N 7/18

[52] U.S. Cl. 348/150; 348/161

[58] Field of Search 348/150, 143, 348/149, 151, 152, 156, 154, 155, 157, 158, 160, 161, 153; 360/14.1, 14.2, 14.3; 386/4, 52, 64, 62, 61, 46, 66, 95; H04N 7/18

[56] References Cited

U.S. PATENT DOCUMENTS

3,935,380	1/1976	Coutta	348/150
4,145,715	3/1979	Clever	348/150
4,326,218	4/1982	Coutta et al.	348/150
4,630,110	12/1986	Cotton et al.	348/153
4,641,203	2/1987	Miller	386/95
5,216,502	6/1993	Katz	348/150
5,491,511	2/1996	Odle	348/153

Primary Examiner—Tommy P. Chin
Assistant Examiner—Y. Lee
Attorney, Agent, or Firm—Eugene E. Renz, Jr., PC

[57] ABSTRACT

A surveillance system which can store and replay information which is not generated contemporaneously. In some point-of-sale systems, the behavioral events occur before the transaction data is generated. The present system asynchronously records the video signals corresponding to the behavioral events and the transaction data. Upon playback, the transaction data is matched up with the behavioral event being replayed from the video tape.

5 Claims, 9 Drawing Sheets

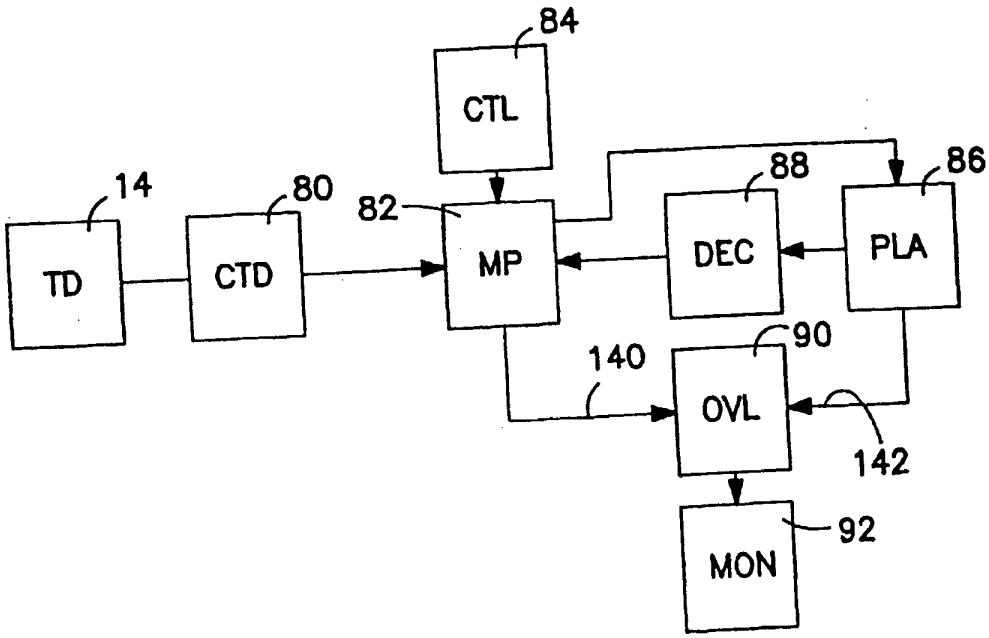

EXHIBIT 3

99604848

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/239,671	01/29/1999	WILLIAM DANIEL TOOHEY	99-60484-5	6425

7590 11/27/2001

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Final Response Appeal
DUE: 2-27-2002
DATE:

EXAMINER
ST CYR, DANIEL

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 11/27/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/239,671	Applicant(s) TOOHEY, WILLIAM DANIEL
	Examiner Daniel St.Cyr	Art Unit 2876

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Application/Control Number: 09/239,671
Art Unit: 2876

DETAILED ACTION

1. Receipt is acknowledged of the amendment filed 8/23/01 in which claim 12 has been amended.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-10, 21, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Katz, US Patent No. 5,920,338.

Katz discloses an asynchronous video event and transaction data multiplexing technique for surveillance system comprising: a video camera 16 or a plurality of cameras 100, 102, 104, for capturing video images of a transaction; an input device 20 for collecting data associated with the transaction; a database management system 14 for organizing the video images and data associated with the transaction (see figures 1-2; col. 4, line 36+).

Re claims 2-4, the data associated with the transaction includes time data, date data, and monetary data (see col. 8, lines 59-68 and col. 10, line 11).

Re claim 5, wherein the video images are captured based upon a signal that is produced in response to the input device collecting data (see figure 7; claim 1).

Re claim 6, wherein the images are captured based upon a clock time signal (see col. 6, lines 18-36).

Re claim 7, a terminal for allowing an operator to input queries into the database and received the image and data associated with the transaction in response to the queries (see col. 6, line 60 to col. 7, line 39).

Re claims 8-10, the transaction is a toll collection (financial collection) and /or grocery purchasing (retail) (see col. 7, lines 21-26).

Re claims 21, 24-26, the limitations have been met above.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 11-20, 22-23, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz. The teachings of Katz have been discussed above.

Re claims 11, 22, 23, and 27, Katz fails to disclose or fairly suggests that video signals are captured based upon a bar code reader reading a bare code label wherein the bar code reader includes an emitter for generating a beam of light and a detector for detecting the beam of light wherein the camera is activated when an item breaks the beam of light. However, Official notice is taken that bar code readers having emitters for generating beams of lights and detectors for detecting the beams of lights are notoriously old and well known in the art for processing retail items at POS terminals. Therefore, it would have been obvious to employ a bar code reader at the POS terminal of Katz wherein the items would be labeled with bar codes for providing rapid and

reliable data entries during video processing wherein the camera would activate when an item breaks the beam of light (when an item is scanned).

Re claims 12-20, Katz fails to disclose or fairly suggest using a portion of the data as a key for retrieving the image correlated data. However, Official notice is taken that this is old and well known in the art that relational databases use a portion of the data as a key (a primary key or an index) for retrieving the stored data. Furthermore, relational databases are known to provide greater storage space. Therefore, it would have been obvious to utilize a relational database for storing the data of Katz wherein a portion of the data would be used as a key for retrieving the data.

Response to Arguments

6. Applicant's arguments filed 8/23/01 have been fully considered but they are not persuasive. (see examiner remarks).

REMARKS:

In response to the applicant's general argument that Katz (5,216,502) does not disclose having both transactional data and video data in a database. The examiner respectfully disagrees. Katz discloses having both transactional data from the lane controller 26, frames of video, and including additional data to be recorded at the database 50 within the database system 40 (see col. 9, lines 19-53). Furthermore, the applicant claims that "a database management system for organizing the video images and data associated with the transaction into a database". The applicant **does not** claim in claims 1 and 12 having **both** transactional data and the video data in the **same** database. The applicant argument is not persuasive.

Re claims 11-20, 22, 23, and 27, the examiner took Official notice to reject these claims under 35 U.S.C. 103(a). The applicant failed to challenge the rejection. Therefore, the claims remain rejected as previously stated in the prior office action. Generally, the applicant's argument is not persuasive. Refer the rejection above.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel St.Cyr whose telephone number is 703-305-2656. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Daniel St.Cyr
Examiner
Art Unit 2876

DS
October 29, 2001

MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Form PTO-1449
(Rev. 2-32)

U.S. Department of Commerce
Patent & Trademark Office

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

Atty. Docket No.	Serial No.
SAIC0001	09/239,671 Herewith

Applicant: William Daniel TOOHEY

Filing Date	Group
Herewith 1/29/99	2876 Not Assigned

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date (if appropriate)
DS		5,857,152	1/5/99	Everett	455	406	2/1/95

FOREIGN PATENT DOCUMENTS

		Document	Date	Country	Class	Sub-class	Translation Yes/No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
Daniel St. Cyr	10/28/01

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Form PTO-FB A820
(also form PTO-1449)
GTM/BDD/acd/36609.184567/SAIC0001/52641

EXHIBIT 4

Atty:
Docket/Matter No:
Action:
Due:
C/U:

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/239,671	01/29/99	TOOHEY W	SAIC0001

EXAMINER	
ST.D	
ART UNIT	**PAPER NUMBER**
2876	

DATE MAILED: 06/21/00

MMC1/0621

GEORGE T MARCOU
KILPATRICK STOCKTON
SUITE 800
700 - 13TH STREET N W
WASHINGTON DC 20005

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

2 - Mail Copy

PTO-90C (Rev. 2/95)

Office Action Summary	Application No. 09/239,671	Applicant(s) Toohey
	Examiner Daniel St.Cyr	Group Art Unit 2876

☒ Responsive to communication(s) filed on *Jan 29, 1999*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-27* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-27* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Objections

1. Claim 12 is objected to because of the following informalities: line 2 "it" should be changed to --the transaction--. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-10, 21, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Katz, US Patent No. 5,920,338.

Katz discloses an asynchronous video event and transaction data multiplexing technique for surveillance system comprising: a video camera 16 or a plurality of cameras 100, 102, 104, for capturing video images of a transaction; an input device 20 for collecting data associated with the transaction; a database management system 14 for organizing the video images and data associated with the transaction (see figures 1-2; col. 4, line 36+).

Re claims 2-4, the data associated with the transaction includes time data, date data, and monetary data (see col. 8, lines 59-68 and col. 10, line 11).

Re claim 5, wherein the video images are captured based upon a signal that is produced in response to the input device collecting data (see figure 7; claim 1).

Re claim 6, wherein the images are captured based upon a clock time signal (see col. 6, lines 18-36).

Re claim 7, a terminal for allowing an operator to input queries into the database and received the image and data associated with the transaction in response to the queries (see col. 6, line 60 to col. 7, line 39).

Re claims 8-10, the transaction is a toll collection (financial collection) and /or grocery purchasing (retail) (see col. 7, lines 21-26).

Re claims 21, 24-26, the limitations have been met above.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 11-20, 22-23, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz. The teachings of Katz have been discussed above.

Re claims 11, 22-23, and 27, Katz fails to disclose or fairly suggests that video signals are captured based upon a bar code reader reading a bare code label wherein the bar code reader includes an emitter for generating a beam of light and a detector for detecting the beam of light

wherein the camera is activated when an item breaks the beam of light. However, Official notice is taken that bar code readers having emitters for generating beams of lights and detectors for detecting the beams of lights are notoriously old and well known in the art for processing retail items at POS terminals. Therefore, it would have been obvious to employ a bar code reader at the POS terminal of Katz wherein the items would be labeled with bar codes for providing rapid and reliable data entries during video processing wherein the camera would activate when an item breaks the beam of light (when an item is scanned).

Re claims 12-20, Katz fails to disclose or fairly suggest using a portion of the data as a key for retrieving the image correlated data. However, Official notice is taken that this is old and well known in the art that relational databases use a portion of the data as a key (a primary key or an index) for retrieving the stored data. Furthermore, relational databases are known to provide greater storage space. Therefore, it would have been obvious to utilize a relational database for storing the data of Katz wherein a portion of the data would be used as a key for retrieving the data.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clever, US Patent No. 4,145,715, discloses a surveillance system. Coutta et al, US Patent No. 4,337,482, discloses a surveillance system. Cotton et al, US Patent No. 4,630,110, disclose a surveillance system. Katz, US Patent No. 5,216,502, discloses a surveillance system for automatically recording transaction. Katz, US Patent No. 5,920,338, disclose an

asynchronous video event and transaction data multiplexing technique for surveillance system. Ando et al, US Patent No. 6,042,008, disclose a toll collection system of toll road and in-vehicle unit for the same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel St.Cyr** whose telephone number is (703) 305-2656. The examiner can normally be reached between the hours of 7:30 AM to 6:00 PM Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Donald Hajec**, can be reached on (703) 308-4075. The fax phone number for this Group is (703)308-5841 or (703) 308-7722.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**donald.hajec@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Application/Control Number: 09/239,671

Art Unit: 2876

June 15, 2000
DS

THIEN M. LE
PRIMARY EXAMINER

Form PTO 948 (Rev. 8-98) U.S. DEPARTMENT OF COMMERCE - Patent and Trademark Office Application No. 09/239,674

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 1/29/99 are:

A. ☐ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. ☑ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be sumitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:
   Black ink. Color.
   ___ Color drawings are not acceptable until petiton is granted.
   Fig(s) ___
   ___ Pencil and non black ink not permitted. Fig(s) ___
2. PHOTOGRAPHS. 37 CFR 1.84 (b)
   ___ 1 full-tone set is required. Fig(s) ___
   ___ Photographs not properly mounted (must use brystol board or photographic double-weight paper). Fig(s) ___
   ___ Poor quality (half-tone). Fig(s) ___
3. TYPE OF PAPER. 37 CFR 1.84(e)
   ___ Paper not flexible, strong, white, and durable.
   Fig(s) ___
   ___ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) ___
   ___ Mylar, velum paper is not acceptable (too thin).
   Fig(s) ___
4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:
   ___ 21.0 cm by 29.7 cm (DIN size A4)
   ___ 21.6 cm by 27.9 cm (8 1/2 x 11 inches)
   ___ All drawing sheets not the same size.
   Sheet(s) ___
   ___ Drawings sheets not an acceptable size. Fig(s) ___
5. MARGINS. 37 CFR 1.84(g): Acceptable margins:
   Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm
   SIZE: A4 Size
   Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm
   SIZE: 8 1/2 x 11
   Margins not acceptable. Fig(s) 1-3, 6-9, 11, 12A
   ___ Top (T) ___ Left (L)
   ___ Right (R) ___ Bottom (B)
6. VIEWS. 37 CFR 1.84(h)
   REMINDER: Specification may require revision to correspond to drawing changes.
   Partial views. 37 CFR 1.84(h)(2)
   ___ Brackets needed to show figure as one entity.
   Fig(s) ___
   ___ Views not labeled separately or properly.
   Fig(s) ___
   ___ Enlarged view not labeled separetely or properly.
   Fig(s) ___
7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3)
   ___ Hatching not indicated for sectional portions of an object.
   Fig(s) ___
   ___ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) ___
8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)
   ___ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) ___
9. SCALE. 37 CFR 1.84(k)
   ___ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.
   Fig(s) ___
10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l)
    ___ Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality).
    Fig(s) ___
11. SHADING. 37 CFR 1.84(m)
    ___ Solid black areas pale. Fig(s) ___
    ___ Solid black shading not permitted. Fig(s) ___
    ___ Shade lines, pale, rough and blurred. Fig(s) ___
12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)
    ___ Numbers and reference characters not plain and legible.
    Fig(s) ___
    ___ Figure legends are poor. Fig(s) ___
    ___ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1)
    Fig(s) ___
    ___ English alphabet not used. 37 CFR 1.84(p)(2)
    Figs ___
    ___ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3)
    Fig(s) ___
13. LEAD LINES. 37 CFR 1.84(q)
    ___ Lead lines cross each other. Fig(s) ___
    ___ Lead lines missing. Fig(s) ___
14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t)
    ___ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) ___
15. NUMBERING OF VIEWS. 37 CFR 1.84(u)
    ___ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) ___
16. CORRECTIONS. 37 CFR 1.84(w)
    ___ Corrections not made from prior PTO-948 dated ___
17. DESIGN DRAWINGS. 37 CFR 1.152
    ___ Surface shading shown not appropriate. Fig(s) ___
    ___ Solid black shading not used for color contrast.
    Fig(s) ___

COMMENTS

REVIEWER ___ DATE 4/20/99 TELEPHONE NO. (703) 305-1904

ATTACHMENT TO PAPER NO. 11

Notice of References Cited

Application No.	Applicant(s)		
09/239,671	Toohey		
Examiner		Group Art Unit	Page 1 of 1
Daniel St.Cyr		2876	

U.S. PATENT DOCUMENTS

		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS
	A	4,145,715	03/1979	Clever	348	150
	B	4,337,482	06/1982	Coutta	348	159
	C	4,630,110	12/1986	Cotton et al	348	153
	D	5,216,502	06/1993	Katz	348	150
	E	5,920,338	07/1999	Katz	348	150
	F	6,042,008	03/2000	Ando et al	235	384
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
	N						
	O						
	P						
	Q						
	R						
	S						
	T						

NON-PATENT DOCUMENTS

		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
	U		
	V		
	W		
	X		

EXHIBIT 5

PATENT
Attorney Doc. 99604845

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
William Daniel Toohey

Serial No.: 09/239,671

Filed: January 29, 1999

For: Digital Video Audit System

Group Art Unit: 2876

Examiner: Daniel St. Cyr

CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(A))
EXPRESS MAIL LABEL #EL692809212US
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as Express Mail in an envelope addressed to: Assistant Commissioner for Patents, Box DAC, Washington, D.C. 20231, on August 23, 2001.

Signature

TIMOTHY HUBALIK

Box Patent Amendment
Commissioner for Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

RESPONSE TO OFFICE ACTION

Sir:

In response to the Office Action dated June 21, 2000, Applicant hereby amends the application as follows:

In the claims:

Claim 12 (Amended)

A method of creating a transaction based database comprising:

capturing an image of the transaction as the transaction [it] occurs;

collecting data correlating to the transaction;

storing the image and the data into a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data.

REMARKS

Applicant has amended the claims in order to overcome the Examiner's objections under 35 U.S.C. § 112. Applicant submits that the amended claims comport with all of the requirements of § 112 and requests that the Examiner now withdraw this objection.

Applicant respectfully requests reconsideration of the prior art rejections set forth by the Examiner under 35 U.S.C. §§ 102 and 103. Applicant submits that the references of record, whether considered alone or in combination, fail to either teach or suggest Applicant's presently claimed invention.

In particular, Applicant notes that the present invention is directed to a system for collecting and organizing data, including a database management system for organizing video images and data associated with a transaction into a database. See, for example, claim 1. As alternately described in claim 12, Applicant's claimed invention is directed to a method of creating a transaction database comprising steps of storing an image of a transaction and data correlated to the transaction into a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data. See, for example, claim 12. Applicant submits that the prior art of record fails to provide any teaching or suggestion whatsoever regarding the presently claimed invention as described above.

In particular, Applicant notes that the primary reference upon which the Examiner relies in rejecting the claims under 35 U.S.C. §§ 102 and 103 suffers from the shortcomings of the prior art noted in Applicant's description of the background of the invention. Specifically, the Katz reference, U.S. Patent No. 5,920,338, is directed to a surveillance system which asynchronously records video signals corresponding to behavioral events

and transaction data. In order to achieve playback of this information, the system requires that the transaction which is stored separate and apart from the video information be matched with the video information being replayed from a video tape. See, for example, the abstract of the disclosure in the Katz reference.

Indeed, a thorough review of the Katz reference provides no teaching or suggestion regarding Applicant's storage of both transactional data and video images in a database as claimed. In contrast with the claimed invention, Katz described a system where two separate storage units are used for respectively storing video images related to a transaction and separate transaction data. As a result of utilization of these two separate and distinct storage media, it is absolutely necessary that each media include synchronization information or signals stored with the respective video and transactional data. This is clearly detailed in the Katz reference in the Summary of the Invention, in column 2, lines 60-67. Here the disclosure of Katz recognizes that "the first recording means must also store the synchronizing signal." (emphasis added) The digital signals are stored separately on the video tape so as not to degrade either the digital signals or the video signals.

In column 3, Katz further states in the Summary of the Invention, that a second recording means stores the digital signals along with all other event or transaction data. The second recording means also stores the synchronizing signals. See Katz, column 3, lines 1-5. A playback means then retrieves the information saved by the two storage devices. See Katz, column 3, lines 4-5. In Katz, a control means synchronizes digital data from the second recording means with composite video signal by comparing the synchronizing by signals stored by both recording means. See specifically, Summary of

the Invention at claims 14-16. It is apparent from the Katz disclosure that each storage unit must be separately searched in order to retrieve both video and transaction information. This is substantially different from the present information where a database is simply searched for the records corresponding to a single identifier. This can readily be accomplished by any known database access technique including linked lists, etc.

The device disclosed in the Katz reference is substantially different than that disclosed in the present invention. Specifically, Katz requires an entirely separate structure which provides correlation between the two separately stored signals. In contrast with the Katz reference, the present invention uses a single database for storing and retrieving both video and corresponding data relating to the video information. This is significantly better than the system of Katz in that there is no need to spend time searching for two separate data stores. Rather, a single transaction identifier is sufficient to more quickly pull the data from this single database with a single inquiry.

In light of the foregoing, Applicant respectfully submits that the references of record fail to either teach or suggest the presently claimed invention. Accordingly, Applicant requests that the Examiner withdraw the prior rejections and now allow all claims in the application.

The Commissioner is hereby authorized to charge any additional fees required for submission of this document to Deposit Account No. 13-0019.

Respectfully submitted,

Date: August 23, 2001

By: Robert J. Depke, Reg. No. 37,607

MAYER, BROWN & PLATT
P.O. Box 2828
Chicago, IL 60690-2828

CLEAN VERSION OF AMENDED CLAIM

Claim 12

A method of creating a transaction based database comprising:

capturing an image of the transaction as the transaction occurs;

collecting data correlating to the transaction;

storing the image and the data into a database such that a query into the database using a portion of the data acts as a key for retrieving the image correlated to the data.

Please type a plus sign (+) inside this box → [+]

PTO/SB/122 (10-00)
Approved for use through 10/31/2002. OMB 0651-0035
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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CHANGE OF CORRESPONDENCE ADDRESS
Application

Address to:
Assistant Commissioner for Patents
Washington, D.C. 20231

Application Number	09/239,671
Filing Date	1/29/99
First Named Inventor	TOOHEY
Group Art Unit	2876
Examiner Name	ST. CYR
Attorney Docket Number	99604845

Please change the Correspondence Address for the above-identified application to:

☐ Customer Number [ ] → *Type Customer Number here*

Place Customer Number Bar Code Label here

OR

☒ Firm *or* Individual Name	ROBERT J. DEPKE, MAYER, BROWN & PLATT				
Address	P.O. BOX 2828				
Address					
City	CHICAGO	State	IL	ZIP	60690
Country	U.S.				
Telephone	(312) 701-8786	Fax	(312) 706-8772		

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I am the :

☐ Applicant/Inventor.

☐ Assignee of record of the entire interest.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☒ Attorney or Agent of record.

☐ Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number _____

Typed or Printed Name: ROBERT J. DEPKE

Signature: [signature]

Date: AUGUST ~~20~~ 23, 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 1 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXHIBIT 6

US005216502A

United States Patent [19]

Katz

[11] Patent Number: 5,216,502

[45] Date of Patent: Jun. 1, 1993

[54] SURVEILLANCE SYSTEMS FOR AUTOMATICALLY RECORDING TRANSACTIONS

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[21] Appl. No.: 629,255

[22] Filed: Dec. 18, 1990

[51] Int. Cl.[5] H04N 7/18

[52] U.S. Cl. 358/108; 358/105

[58] Field of Search 358/108, 93, 183, 102, 358/105, 209, 903

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[57] ABSTRACT

A system for making and reviewing video recordings of transactions occurring at cashier lanes uses a television camera for developing frames of video signals of the transactions at two or more cashier lanes. A register at each lane generates digital signals representing events that occur at the lanes. A computer responsive to the digital signals generates a digital transaction signal. A VCR records the camera video signal and the computer digital transaction signal on a cassette, the digital transaction signal being recorded in a certain relation (e.g. in synchrony) with the camera video signal and in such a manner as to substantially not affect the clarity of each video frame. In a playback mode, the VCR generates a playback video frame signal, and the computer generates an overlay control signal. An overlay means responsive to various signals generates a composite video signal of an alpha-numeric display of the digital transaction information relating to the desired cashier lane overlaying the video signal, the alpha-numeric information being positioned in the composite video signal so as not to obscure that portion of the video frame that pertains to the desired cashier lane. In another aspect of the invention, a computer responds to the register signals and generates a video storage signal at the start of a subsequent transaction and a transaction summary signal. The overlay means generates a summary snapshot video frame signal comprising alpha-numeric transaction summary information overlaying the picture of the merchandise at the start of the transaction.

18 Claims, 4 Drawing Sheets